# **Dvorak Developments**

Dvorak Developments #44 (Volume 13, Number 2) — Winter 1985

#### IRS Action Could Save Millions

by Randy Cassingham

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A \$775 million dent could be made in the Federal budget deficit every year if the Internal Revenue Service goes ahead with a proposal to switch to the Dvorak keyboard.

The IRS, which is currently modernizing its system of tax return examinations, is considering that the agents, auditors, and examiners that currently write their reports longhand be trained to use the Dvorak keyboard when they switch to a computerized reporting system.

Since the examiners would have to be trained to use the computers anyway, Dvorak training could be included for "no increased training expense," according to an IRS report. "What this boils down to is a rare opportunity to provide our examiners a choice," the report says. "If (the examiners) are already Qwerty typists they can either continue using Qwerty or opt to learn Dvorak. Non-typists should be trained using the Dvorak system from the start."

The IRS is purchasing 15,000 portable computers in the first phase of the modernization program. It is too late to specify the Dvorak layout in the portables that will be purchased this year. But when informally asked whether they would be able to supply the Dvorak if it was specified, all of the manufacturers asked said they would be able to comply with a Dvorak requirement.

The report, contained in a six page memo to the office of Automated Examination Systems, assumed that 50 percent of the examiners would use Dvorak, and a "conservative projection of yearly productivity increases from using Dvorak" shows examiners could complete nearly 71,000 more examinations than if they used Qwerty, resulting in an increase in collected taxes of more than \$775 million per year. The one-time cost to convert the computers and provide tutorial software is estimated to be less than \$100,000.

"We have the opportunity to provide equipment which, as all studies have indicated, will allow (IRS examiners) to accomplish their jobs with more efficiency, more accuracy and less fatigue," the report's author, **John Emerson**, wrote. "I would like to see us be one of the leaders in the conversion to this more logical and productive system."

In a telephone interview, Emerson confirmed that the IRS is very interested in the Dvorak. 'I worked up some figures that seemed to make it eminently profitable to make the transition." But, he said, the IRS isn't plunging headlong into the improved layout. 'I think there's reluctance to be the first (to change over)." Emerson noted that the Air Force was also interested in the Dvorak. "I wish they would hurry up, because that would make it a heck of a lot easier" if they went first, he said.

'We are at the point where we have decided to look at it and give it a chance," Emerson said. "If I was back in the field as an agent I would use it myself, because it would improve my own efficiency which I would get rated on."

Virginia Russell's DIF column didn't arrive in time for publication.

#### The Smithsonian Requests Dvorak Typewriter

The Smithsonian Institution, recognizing the historical importance of the Dvorak keyboard, has contacted the Dvorak International Federation with a request for one of the early typewriters made with the Simplified Layout.

DIF owns the International typewriter that was used by Dr. Dvorak's students in the 1930's to win several speed typing competitions and set several records. DIF is considering donating this typewriter to be displayed by the Smithsonian.

The Simplified Layout is a slightly different design than the current Dvorak layout which was standardized by the American National Standards Institute in 1982. Most notably, the digits on the top row of the SK are in a non-numeric order based on frequency of use.

The presentation, which will include a formal ceremony, will be in 1986. Watch for details of the event in future editions.

#### We Changed our Name

Starting with this issue, we're changing the spelling of our name from **Dvorak Dvelopments** to **Dvorak Developments**. The change was made to facilitate the indexing procedures in libraries and companies, and because most people were referring to us as **Dvorak Developments** anyway. **Dvorak Developments** remains the only publication that reports on the Dvorak keyboard.

## Corrections and Amplifications

Two typographical errors crept into the Fall issue: The phone number for the Dvorak International Federation was incorrectly listed. The correct number is (802) 247-6020. Also, in the classified advertisement for the Switch to Dvorak company, the company's address showed an incorrect box number. The correct address for Switch to Dvorak company is PO Box 2919, Satellite Beach FL 32937. We are sorry for any trouble these errors have caused.

In the lead story on page one of the Fall issue, it was reported that the Air Force was in the process of switching to the Dvorak and that the switch would "involve as many as 800,000 typists". The Air Force has denied that the actual number would be as many as 800,000, but would not or could not supply the actual number. It should be made clear to readers that such a large scale conversion might take several years to accomplish, and that careful study and implementation procedures would necessarily be used.

#### Letters

#### Dvorak vs Dvorak

I suggest you include information in each issue on how to pronounce "Dvorak".

Larry Stempnik Warren, MI

We agree. Often we talk to people who pronounce the name of the keyboard as they would the Czech composer, but Dr. Dvorak preferred that his name be pronounced in an American manner: "duh-VOR-ack".

#### SmartKey vs XtraKey

I am sorry to report that you blew it in saying that SmartKey "uses the smallest amount of the computer's memory" (of several similar programs). XtraKey, by Xpert Software, uses far less memory — at least in the version I have. XtraKey deserves mention in your newsletter too.

Roy M. Dalrymple Henderson, TX

XtraKey wasn't mentioned because we didn't know about it when the Fall issue was published. Now that we have information on it, XtraKey is listed in the product alert section of this issue. We don't know about all of the products available, so if you don't see something listed that you know exists, please tell us about it!

The claim that SmartKey uses the smallest amount of RAM came from literature provided by SRT, the publishers of Smart-Key. XtraKey does, it seems, use less memory in some applications.

#### **Dvorak** in School

Computer manufacturers would be wise to form a body to teach Dvorak in high schools. As we know, lack of typing skills is one of the main reasons inhibiting computer sales. I should think the computer manufacturers would make a tremendous effort to see this implemented. Even at the point of sale, they could simply say "If you don't type now, use Dvorak to start."

Tom Sherman Fox Point, WI

Dvorak keyboard training will be offered in schools as soon as businesses start asking for Dvorak-trained workers. It looks likely that those requests will increase soon with so many businesses and governmental agencies looking in to the Dvorak as a productivity aid.

#### **Selectric Elements**

I'd like to mention a potential source for lower-cost typing balls designed to convert an IBM Selectric typewriter to Dvorak format. Currently, Camwil offers such balls, at a steep \$85 per. A more reasonably priced supplier of typing elements is GP Technologies, Inc. GP Does not yet offer Dvorak elements, but perhaps with enough encouragement and the information that the US government is moving toward Dvorak, they might. Readers interested in lobbying GP can call them at (800) 523-1809 (in Pennsylvania, (215) 563-2200) or write them at 1737 Chestnut Street, Philadelphia PA 19103.

R. Stephen McNally
Austin, TX

Send letters to the Editor, **Dvorak Developments**, PO Box 717, Arcata CA 95521. Letters selected for publication will be edited for length and clarity.

### dvorak

The Dvorak International Federation is an organization whose purpose is to promote the Dvorak Keyboard. DIF prides

mote the Dvorak Keyboard. DIF prides itself in knowing "all there is to know" about the Dvorak Keyboard. Requests for information are addressed immediately. DIF works with computer manufacturers, corporations, companies and individuals helping them to implement the Dvorak Keyboard. Information provided includes:

- Availability on computers with the Dvorak arrangement.
- Software and hardware conversion,
- Training suggestions both for organizations and individuals,
- Where to find typewriters,
- Who is using the keyboard,
- Where to find written materials on the keyboard.

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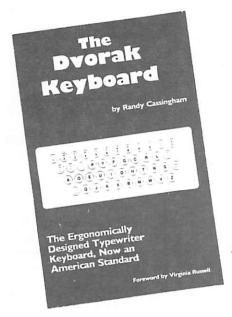
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#### Finally . . . A Book about the Dvorak!



ISBN 0-935309-10-1

If you have tried to find information about the Dvorak keyboard, you know how hard it is to find something that is complete, accurate, and upto-date. Now your search is over with the publication of The Dvorak Keyboard by Randy Cassingham, the editor of Dvorak Developments.

#### Includes:

- · The logical design and evolution of the Dvorak
- The many factors that allowed Qwerty to become entrenched
- Analysis of why it took more than 50 years for the Dvorak to gain wide acceptance
- Information about how to make the change to Dvorak, whether for an individual or a large corporation
- · Hard-to-find information about the special keyboards Dr. Dvorak designed for one-handed typing
- · A foreword by Virginia Russell, president of the Dvorak International Federation

And a detailed appendix listing the many products available that support the keyboard.

Your book will be shipped as soon as possible after this edition comes off the press, but no later than January 31, 1986.

Money Back Guarantee: If you are not satisfied for any reason, return the book in good condition within ten days and get your money back, including

\$12.95 Plus \$1.00 shipping, and tax if delivered in California.

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#### Then ... Keep Up To Date With

### **Dvorak Developments**

Things are happening fast with the Dvorak keyboard. New studies are in progress, different companies and governmental agencies are switching over, and new products are coming out. Dvorak Developments is the only publication devoted to keeping you informed about this changing field.

Published quarterly, Dvorak Developments contains:

- · News about the companies, agencies and schools switching over to Dvorak
- Alerts of new products that support the keyboard
- Reports on the results of scientific and practical studies on the keyboard
- · Detailed overviews on Dvorak-related products so you can see what products
- · Listings of the Dvorak-related articles that appear in popular and professional publications

It's all just \$12 per year. (North America only. Foreign addresses: add \$4.00 for special handling and air mail delivery. Please pay in U.S. Funds only.)

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#### Order Now and Save!

☐ Yes, send mecopies of The Dvorak Keyboard by Randy Cassingham. I understand that my book will be shipped when it comes off the press, but no later than 1/31/86. I enclose \$10.95 for each book. (Calif. residents please add \$0.66 sales tax per copy.)
☐ I'm ordering after 1/31/86. Please send me copies of <i>The Dvorak Keyboard</i> at \$12.95 for each book, plus \$1.00 for shipping (Calif. residents please add \$0.78 sales tax per copy).
☐ Please start my subscription to <i>Dvorak Developments</i> , the only newsletter about the Dvorak. I enclose \$12 for one year.
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#### **Product Alerts**

Arrays, Inc., 11223 South Hindry Avenue, Los Angeles CA 90045, (213) 410-3977, has announced a new computer based tutorial program called "Learn to Type", which will be available in the Spring of 1986. The \$49.95 program can record the progress of up to 30 students at one time, and allows the user to create custom lessons so that specific problem areas can be addressed. Both Qwerty and Dvorak are taught. The program will run on the Apple IIe, IIc and Macintosh, the IBM PC and PCjr, and the Commodore-64.

The **Dvorak International Federation**, PO Box 128, Brandon VT 05733, (802) 247-6020, which offers memberships for telephone consultation on the Dvorak, has announced that their \$20 per year membership fee will be raised next year. The new fee, however, had not been set by press time.

Paragon Courseware, 4954 Sun Valley Road, Del Mar CA 92014, (619) 481-1477, offers MacQwerty for the Apple Macintosh. It allows you to reconfigure your keyboard to any layout, and a Dvorak definition file is included. \$35

**Prelco**, 14202 Galy Street, Tustin CA 92680, (714) 544-3041, has announced a memory chip for the Commodore-64 computer that allows selection between Dvorak and Qwerty keyboard layouts at the flick of a switch. It works with most software; \$39.95

Q.A.D. Systems, 342 East Schrock Road, Westerville OH 43081, (614) 882-0052 offers Q-Vert Mentor, a Dvorak keyboard

tutorial program for the Commodore-64. Mentor also comes with a subroutine which, when included in any BASIC program, switches the keyboard to Dvorak. Retail price is \$29.95, but Q.A.D. offers a \$5 discount to **Dvorak Developments** readers.

Scarborough Systems, Inc., 55 South Broadway, Tarrytown NY 10591, (800) 882-8222, offers MasterType, a computer based keyboard tutorial software package. The package is available for IBM, Apple, Atari, and Commodore machines, but only the Apple version has Dvorak lessons. \$39.95

Sierra On-Line Inc., PO Box 485, Coarsegold CA 93614, (209) 683-6858, publishes WizType, a software tutorial program. You can select between Dvorak and Qwerty lesson plans. Versions are available for the Apple II line (\$34.95) or the Commodore-64 (\$24.95).

Roger Wagner Publishing, Inc., PO Box 582, Santee CA 92071, (619) 562-3670, publishes "The Write Choice", a word processor and typing tutor for the Apple II series. The tutorial includes lessons for Dyorak typing. \$44.95

Xpert Software, 8865 Polland Avenue, San Diego CA 92123, (619) 268-0112 publishes XtraKey, a keyboard macro program for computers running the CP/M 2.2 operating system. It comes with a definition file to switch the keyboard to Dvorak. XtraKey retails for \$39.95, but Xpert has offered a \$5 discount to readers of *Dvorak Developments*.

### SURESTROKE/DVORAK

Don't miss the benefits of Dvorak another day. SureStroke/Dvorak gives you a sophisticated keystroke translator for PC-DOS applications, superb Dvorak typing Coach, self-motivation audio cassette, transfer letters, keytop puller, and manual. \$95 plus \$4 shipping/handling; VISA/MC/AMEX/Check. You can stroke the Dvorak today!

Seasoned Systems, Inc. Box 3720 Chapel Hill, NC 27515 (800) 334-5531 or in NC (919) 732-9391



## One Keyboard Fits All



The Maxi-Switch replacement keyboard is switch selectable to fit the IBM PC, XT, and AT computers (and compatibles). The full-travel keys provide a superior tactile response. \$125.

Available in Dvorak or Qwerty layouts

#### The Maxi-Switch Co.

Subsidiary of EECO Inc. 9697 East River Road Minneapolis MN 55433 (612) 755-7660 TWX 910-576-2690

#### **Product Overviews**

Product overviews are detailed descriptions of Dvorak-related products. The regular 'for sale' version of the product is tested, then described in full so that readers can make intelligent choices on what products fit their needs. Opinions expressed in the overview are those of the author.

#### Keyer: Dvorak on Lap Computers

by Bob Nelson

**Description:** Keyboard redefinition program for the Radio Shack Model 100, 200 and NEC lap computers. \$14.95

**Supplier:** The Covington Group, 310 Riverside Drive, New York NY 10025.

Machine used for test: Radio Shack Model 100 with 24K memory.

KEYER lets you move the location of keys on the Radio Shack Models 100 and 200, and NEC computers, and is useful to convert these machines to Dyorak.

The program comes on a cassette and is easy to load and use. Before running the program, you must open a text file in which you type two letters or characters per line. The first character on each line is the target character (the one you want to change to something else), the second character is the source character (the one you want to appear in place of the target character). An example of part of the KEY file to change the upper and lower case Qwerty 'R' to Dvorak 'P' would look like this:

RP rp

In this way you can make a few minor changes or convert the entire keyboard. After you have completed the KEY file, KEYER is run just once. When the program is finished, your keyboard changes will have taken effect and KEYER and the KEY file can be removed from the computer. The changes you have made will remain in effect as long as memory power is retained. The translation takes up only about 180 bytes of precious RAM space.

This program works adequately for Dvorak conversions, but there are some limitations. First, you cannot load machine language programs over KEYER. Doing so will cause your computer to freeze. If you need to load such programs, they must be loaded before KEYER. A second problem arises when you try to type more than 30-35 WPM at the top of a long file. After a short period of rapid typing, the keyboard begins to generate random characters. It should be noted that this problem only shows up when typing extremely fast sequences of characters or when you try to type fast while inserting material near the top of a large text file.

Overall, I found that KEYER provided a reasonable and fairly straightforward means for converting these lap computers to Dvorak. Other than the above mentioned limitations, it worked quite well in most circumstances.

#### Notice

Did you purchase a copy of SmartKey from Software Research Technologies, Inc., as a result of their ad in the Fall issue of this newsletter? If so, please contact *Dvorak Developments*: PO Box 717, Arcata CA 95521.

#### **Back Issues**

• Fall, 1985. Federal agencies start conversion. DIF proposes federal tax credit. Listings of 23 companies with Dvorak-related products. Background information about DIF. 13 bibliographic entries. 8 pages, \$2.

Send check or money order to: Freelance Communications, PO Box 717, Arcata CA 95521.

(For copies of back issues of the DvDv forerunner *Quick Strokes*, contact the old publisher: Quick Strokes, PO Box 643, Sacramento CA 95691.)

## MacQwerty - \$35 Keyboard Reconfiguration Program For the Macintosh

A **Dvorak** keyboard or your custom layout, with a single click or automatically at boot-up. Another click, keyboard reverts to Standard. Reconfiguration program customizes the keyboard. Any non-command key can be relocated and fixed at boot-up to your personal preference. Easy on disk instructions. Visa or M/C.

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## - ANNOUNCING -

# A quick and easy way to convert your Keytops to DVORAK.

Hooleon Keytop overlays give you DVORAK commands in bold red print and original qwerty commands in smaller black print on an opaque background. The overlays are made of rigid high quality plastic with a permanent non-slip adhesive. Printing is on the underside to prevent wear. They look and feel like your original key tops.



#### **Bibliographic Notes**

If you come across Dvorak articles in your reading, we would appreciate it if you would send a copy of the article to **Dvorak Developments**. Thanks to the many readers who sent copies of these articles:

- American Economic Review, May 1985. An interesting article
  by Stanford University professor of economic history Paul
  David about how economics played a role in the entrenchment
  of Qwerty when a superior alternative (Dvorak) was available.
- The Secretary's Friend, September 1985. Short informational article that asks, "Well, secretaries, if there is another keyboard on the horizon, would you rather fight than switch or do you want to bring efficiency to your office?"
- InfoWorld, November 11, 1985. Dvorak Developments got a nice mention in John Dvorak's "Inside Track" column which brought in many new readers. John, who isn't directly related to the keyboard or its inventor, is one of the most popular computer columnists around. He called DvDv "a super newsletter". Thanks for the mention, John.
- Morrow Owners Review (computer group newsletter), Dec 85/Jan 86. Informative article about the Dvorak with information about how to convert Morrow computers.

#### **Classified**

Apple Ile Dvorak/QWERTY (ANSI) Keyboard Switch hardware mod. Keytop overlays display both keyboards, background color matches Apple keys, manually switch instantly, transparent to all software. \$39.95 + \$2.00 ship. CA res add 6% tax. Faultline Micro, POB 3147 Fullerton, CA 92634 (714) 526-5055

Dvorak Typewriters — SCM Model 2500 \$300+\$15 shipping Belmont Adams, 4 Park Ave, Scarborough ME 04074

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